**CLAIMS**:

1. A method of forming integrated circuitry comprising:

forming a silicon nitride comprising layer over a semiconductor substrate; and

etching at least a portion of the silicon nitride comprising layer using an etching chemistry comprising ammonia and at least one fluorocarbon.

2. The method of claim 1 wherein the silicon nitride comprising layer consists essentially of silicon nitride.

3. The method of claim 1 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of from 40:1 to 2:1.

4. The method of claim 1 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 4:1.

5. The method of claim 1 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 6:1.

6. The method of claim 1 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 9:1.

7. The method of claim 1 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of at least 20:1.

8. The method of claim 1 wherein the etching comprises plasma etching.

9. The method of claim 1 wherein the etching comprises magnetically enhanced plasma etching.

10. The method of claim 1 wherein the etching comprises substantially anisotropic etching of the silicon nitride comprising layer.

11. The method of claim 1 wherein the fluorocarbon comprises a hydrofluorocarbon.

12. The method of claim 1 wherein the fluorocarbon is at least one member selected from the group consisting of $C_4F_8$, $C_4F_6$, $C_5F_8$, $CF_4$, $C_2F_6$, $C_3F_8$, $CHF_3$, and $CH_2F_2$.

13. The method of claim 12 wherein the fluorocarbon is at least one member selected from the group consisting of $CF_4$, $CHF_3$, and $CH_2F_2$.

14. The method of claim 1 wherein the etching chemistry comprises at least two fluorocarbons.

15. The method of claim 1 wherein the etching chemistry comprises at least three fluorocarbons.

16. A method of forming integrated circuitry comprising:

forming a layer comprising silicon nitride over a semiconductor substrate;

forming a patterned photoresist comprising masking layer over the silicon nitride layer, the patterned masking layer comprising mask openings therethrough; and

plasma etching the silicon nitride comprising layer through the mask openings substantially selectively to the photoresist comprising layer using an etching chemistry comprising ammonia and at least one fluorocarbon under etching conditions effective to substantially anisotropically etch the silicon nitride comprising layer, the etching chemistry comprising a volumetric ratio of all fluorocarbon to the ammonia of from 40:1 to 3:1 and providing increased selectivity to the photoresist comprising masking layer than would otherwise occur using identical etching chemistry and identical etching conditions without any ammonia.

17. The method of claim 16 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 6:1.

18. The method of claim 16 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 9:1.

19. The method of claim 16 wherein the fluorocarbon comprises a hydrofluorocarbon.

20. The method of claim 16 wherein the fluorocarbon is at least one member selected from the group consisting of $C_4F_8$, $C_4F_6$, $C_5F_8$, $CF_4$, $C_2F_6$, $C_3F_8$, $CHF_3$, and $CH_2F_2$.

21. The method of claim 16 wherein the silicon nitride comprising layer consists essentially of silicon nitride.

22. A method of forming shallow trench isolation in a semiconductor substrate, comprising:

depositing a silicon nitride comprising layer over a bulk semiconductor substrate;

depositing a photoresist comprising masking layer over the silicon nitride comprising layer;

patterning the photoresist comprising masking layer effective to form a plurality of shallow trench mask openings therethrough; and

etching the silicon nitride comprising layer through the mask openings substantially selectively relative to the photoresist using an etching chemistry comprising ammonia and at least one fluorocarbon.

23. The method of claim 22 wherein the silicon nitride comprising layer consists essentially of silicon nitride.

24. The method of claim 22 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of from 40:1 to 2:1.

25. The method of claim 22 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 4:1.

26. The method of claim 22 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 6:1.

27. The method of claim 22 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 9:1.

28. The method of claim 22 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of at least 20:1.

29. The method of claim 22 wherein the etching comprises plasma etching.

30. The method of claim 22 wherein the etching comprises magnetically enhanced plasma etching.

31. The method of claim 22 wherein the etching comprises substantially anisotropic etching of the silicon nitride comprising layer.

32. The method of claim 22 wherein the fluorocarbon comprises a hydrofluorocarbon.

33. The method of claim 22 wherein the fluorocarbon is at least one member selected from the group consisting of $C_4F_8$, $C_4F_6$, $C_5F_8$, $CF_4$, $C_2F_6$, $C_3F_8$, $CHF_3$, and $CH_2F_2$.

34. The method of claim 33 wherein the fluorocarbon is at least one member selected from the group consisting of $CF_4$, $CHF_3$, and $CH_2F_2$.

35. The method of claim 33 wherein the etching chemistry comprises at least two fluorocarbons.

36. The method of claim 33 wherein the etching chemistry comprises at least three fluorocarbons.

37. A method of forming shallow trench isolation in a semiconductor substrate, comprising:

depositing a silicon nitride comprising layer over a bulk semiconductor substrate;

depositing a photoresist comprising masking layer on the silicon nitride comprising layer;

patterning the photoresist comprising masking layer effective to form a plurality of shallow trench mask openings therethrough to the silicon nitride comprising layer; and

plasma etching the silicon nitride comprising layer through the mask openings substantially selectively to the photoresist comprising layer using an etching chemistry comprising ammonia and at least one fluorocarbon under etching conditions effective to substantially anisotropically etch the silicon nitride comprising layer, the etching chemistry comprising a volumetric ratio of all fluorocarbon to the ammonia of from 40:1 to 3:1.

38. The method of claim 37 wherein the etching conditions and ammonia quantity are effective to provide increased selectivity to the photoresist comprising masking layer than would otherwise occur using identical etching chemistry and identical etching conditions without any ammonia.

39. The method of claim 37 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 6:1.

40. The method of claim 37 wherein the etching chemistry comprises a volumetric ratio of all fluorocarbon to the ammonia of no less than 9:1.

41. The method of claim 37 wherein the fluorocarbon comprises a hydrofluorocarbon.

42. The method of claim 37 wherein the fluorocarbon is at least one member selected from the group consisting of $C_4F_8$, $C_4F_6$, $C_5F_8$, $CF_4$, $C_2F_6$, $C_3F_8$, $CHF_3$, and $CH_2F_2$.

43. The method of claim 37 wherein the silicon nitride comprising layer consists essentially of silicon nitride.